



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/586,859

01/22/2007

Kazuhide Fujimoto

Q95835

2918

23373 7590 09/17/2008  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

LOEWE, ROBERT S

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

09/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/586,859	<b>Applicant(s)</b> FUJIMOTO ET AL.	
	<b>Examiner</b> ROBERT LOEWE	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Applicant's arguments/remarks, filed on 8/7/08, have been fully acknowledged.

#### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 4, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirose et al. (US Pat. 4,463,115).

Claims 1 and 8: Hirose et al. teaches a composition comprising (A) an oxyalkylene polymer having a molecular weight up to 30,000 (3:5-6) and contains a hydrolyzable silyl group in each molecule (1:63-45), (B) a tackifier resin (3:21-29), and (C) a curing catalyst (3:47-62). Specifically, in regards to the ratio of equivalents of hydrolyzable silyl groups to the total amount of functional groups of the polymer precursor, reference example 3 of Hirose et al. shows a reaction of a polyoxypropylene diol with a silane-capping agent in such a manner as to yield a silyl-capped polypropylene ether having 55% of the end groups having silyl groups. Such an amount satisfies the limitation that between 0.3 and 0.7 equivalents of hydrolyzable silyl groups are present relative to the total amount of functional groups in the oxyalkylene polymer.

Claim 3: Hirose et al. teaches that the tackifier is present in amounts of from 10 to 140 parts by weight per 100 parts by weight of the polyether, which substantially overlaps the range of instant claim 3 (3:21-29).

Claims 4 and 7: Hirose et al. further teaches that the hydrolyzable group in the hydrolyzable silyl-group containing polymer (A) is represented by the formula (I) of instant claims 4 and 7 (2:20).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (US Pat. 4,463,115) as applied to claim 1 above, and further in view of Ueda et al. (WO03/35755). For convenience, the English-language equivalent, US Pat. 7,144,953 will be relied upon.

Hirose et al. teaches the composition of instant claim 1, as described above. Hirose et al. further teaches that the tackifier is present from 10 to 140 parts by weight based on 100 parts by weight of polyether component (A) of instant claim 5 (3:21-29). Hirose et al. further teaches that

Art Unit: 1796

the hydrolyzable group in the hydrolyzable silyl-group containing polymer (A) is represented by the formula (I) of instant claim 6 (2:20). Hirose et al. does not explicitly teach that the polydispersity of the polyether component (A) be no more than 1.6. However, Ueda et al. does teach employing silyl-terminated polyethers having polydispersities of less than 1.6 (3:60-65). Hirose et al. and Ueda et al. are combinable because they are from the same field of endeavor, namely, curable compositions comprising silyl-terminated polyethers. At the time of the invention, a person having ordinary skill in the art would have found it obvious to employ silyl-terminated polyethers having polydispersities less than 1.6 as taught by Ueda et al. into the compositions as taught by Hirose et al. and would have been motivated to do so because Ueda et al. teaches that employment of polyethers having narrow polydispersities (i.e., less than 1.6), lower viscosity solutions are obtained which are easier to work with than those polyethers having higher polydispersities (3:65-4:3). Hirose et al. teaches pressure sensitive adhesives having little to no solvent (1:34-38). It would be beneficial, in the absence of solvents, to employ lower viscosity polyethers for better workability.

### ***Response to Arguments***

Applicant's arguments filed 8/7/08 have been fully considered but they are not persuasive. Specifically, Applicant's argue that for reference example 3, the molecular weight is presumed to be approximately 8,000 which falls outside the claimed ranges of instant claims 1 and 8. However, Hirose et al. teaches that the oxyalkylene polymers can have a molecular weight of up to 30,000, which encompasses the ranges of the instant claims. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art,

Art Unit: 1796

including nonpreferred embodiments. Further, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. See MPEP 2123 I and II. Applicants further argue that reference example 3 is only employed in a comparison example where no tackifier is present. The polymer of reference example 3, while not blended with the tackifier, still constitutes an oxyalkylene polymer according to the teachings of Hirose et al., and as such could be blended with the tackifiers in the same manner as the polymer of reference example 1. The fact that this was not done does not remove Hirose et al. as prior art. Again, a reference may be relied upon for all that it teaches, including non-preferred embodiments. Further, Hirose et al. explicitly teaches that the oxyalkylene polymers have at least one hydrolyzable group, a tackifier (1:43-44), and a curing catalyst (3:47-56). The teaching of at least one hydrolyzable group can be interpreted as an oxyalkylene polymer having 0.5 equivalents of a hydrolyzable silyl group per each polymer which satisfies the limitation of instant claim 1.

Applicants further argue that Hirose et al. teaches that the molecular weight of the polyether is 3,000 to 15,000 and as such, a person having ordinary skill in the art would not have reason or motivation to arrive at the instant invention based on the teachings of Hirose et al. However, Hirose et al. teaches that the molecular weight of the oxyalkylene polymer can be up to 30,000, which encompasses the ranges of instant claims 1 and 8.

Applicants further argue that Ueda et al. does not teach the molecular weight limitations and amount of hydrolyzable group content present in the oxyalkylene polymers. However, Ueda et al. was not relied upon for these limitations, but rather Ueda et al. was relied upon for the limitation regarding the polydispersity index of instant claim 2.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Loewe whose telephone number is (571)270-3298. The examiner can normally be reached on Monday through Friday from 5:30 AM to 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 1796

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L./

Examiner, Art Unit 1796

20-Aug-08

/Randy Gulakowski/

Supervisory Patent Examiner, Art Unit 1796